

**WHAT IS CLAIMED IS:**

1. A pattern formation method comprising the steps of:  
forming a resist film of a chemically amplified resist material;  
performing pattern exposure by selectively irradiating said resist film with  
5 exposing light while supplying, onto said resist film, a solution including a basic compound; and  
forming a resist pattern by developing said resist film after the pattern exposure.
2. The pattern formation method of Claim 1,  
wherein said solution is water or perfluoropolyether.
- 10 3. The pattern formation method of Claim 1,  
wherein said exposing light is KrF excimer laser, ArF excimer laser or F<sub>2</sub> laser.
4. A pattern formation method comprising the steps of:  
forming a resist film of a chemically amplified resist material;  
performing pattern exposure by selectively irradiating said resist film with  
15 exposing light while supplying, onto said resist film, a solution including a basic polymer;  
and  
forming a resist pattern by developing said resist film after the pattern exposure.
5. The pattern formation method of Claim 4,  
wherein said solution is water or perfluoropolyether.
- 20 6. The pattern formation method of Claim 4,  
wherein said exposing light is KrF excimer laser, ArF excimer laser or F<sub>2</sub> laser.
7. A pattern formation method comprising the steps of:  
forming a resist film of a chemically amplified resist material;  
performing pattern exposure by selectively irradiating said resist film with  
25 exposing light while supplying, onto said resist film, a solution including a compound for

generating a base through irradiation with light; and

forming a resist pattern by developing said resist film after the pattern exposure.

8. The pattern formation method of Claim 7,

wherein said solution is water or perfluoropolyether.

5 9. The pattern formation method of Claim 7,

wherein said exposing light is KrF excimer laser, ArF excimer laser or F<sub>2</sub> laser.

10. A pattern formation method comprising the steps of:

forming a resist film of a chemically amplified resist material;

performing pattern exposure by selectively irradiating said resist film with

10 exposing light while supplying, onto said resist film, a solution including a compound for  
generating a base through application of heat; and

forming a resist pattern by developing said resist film after the pattern exposure.

11. The pattern formation method of Claim 1,

wherein said basic compound is a primary aliphatic amine, a secondary aliphatic

15 amine, a tertiary aliphatic amine, an aromatic amine, an amide derivative, an imide  
derivative, or a compound having a hydroxyl group and including nitrogen.

12. The pattern formation method of Claim 1,

wherein said basic compound is a primary aliphatic amine such as ammonia,  
methyllamine, ethyllamine, n-propyllamine, isopropyllamine, n-butyllamine or isobutyllamine.

20 13. The pattern formation method of Claim 1,

wherein said basic compound is a secondary aliphatic amine such as  
dimethylamine, diethylamine, di-n-propyllamine, diisopropyllamine, di-n-butyllamine,  
diisobutyllamine, di-sec-butyllamine, dipentyllamine, dicyclopentyllamine, dihexyllamine or  
dicyclohexyllamine.

25 14. The pattern formation method of Claim 1,

wherein said basic compound is a tertiary aliphatic amine such as trimethylamine, triethylamine, tri-n-propylamine, triisopropylamine, tri-n-butylamine, triisobutylamine, tri-sec-butylamine, tripentylamine, tricyclopentylamine, trihexylamine, tricyclohexylamine, dimethylethylamine, methylethylpropylamine, benzylamine, phenethylamine or  
5 benzyldimethylamine.

15. The pattern formation method of Claim 1,

wherein said basic compound is an aromatic amine such as diphenyl(p-tolyl)amine, methyldiphenylamine, triphenylamine, phenylenediamine, naphthylamine, diamminonaphthalene, an aniline derivative, a pyrrole derivative, an oxazole derivative, a  
10 thiazole derivative, an imidazole derivative, a pyrroline derivative, a pyrrolidine derivative, a pyridine derivative or a quinoline derivative.

16. The pattern formation method of Claim 1,

wherein said basic compound is an aniline derivative such as aniline, *N*-methylaniline, *N*-ethylaniline, *N*-propylaniline, *N,N*-dimethylaniline, 2-methylaniline, 3-  
15 methylaniline, 4-methylaniline, ethylaniline, propylaniline or trimethylaniline.

17. The pattern formation method of Claim 1,

wherein said basic compound is a pyrrole derivative such as pyrrole, 2H-pyrrole, 1-methylpyrrole, 2,4-dimethylpyrrole or *N*-methylpyrrole.

18. The pattern formation method of Claim 1,

20 wherein said basic compound is an oxazole derivative such as oxazole or isoxazole.

19. The pattern formation method of Claim 1,

wherein said basic compound is a thiazole derivative such as thiazole or isothiazole.

25 20. The pattern formation method of Claim 1,

wherein said basic compound is an imidazole derivative such as imidazole or 4-methylimidazole.

21. The pattern formation method of Claim 1,  
wherein said basic compound is a pyrroline derivative such as pyrroline or 2-methyl-1-pyrroline.

22. The pattern formation method of Claim 1,  
wherein said basic compound is a pyrrolidine derivative such as pyrrolidine, *N*-methylpyrrolidine or *N*-methylpyrrolidone.

23. The pattern formation method of Claim 1,  
wherein said basic compound is a pyridine derivative such as pyridine, methylpyridine, ethylpyridine, propylpyridine, butylpyridine, 4-(1-butylpentyl)pyridine, dimethylpyridine, trimethylpyridine, triethylpyridine, phenylpyridine, aminopyridine or dimethylaminopyridine.

24. The pattern formation method of Claim 1,  
wherein said basic compound is a quinoline derivative such as quinoline or 3-quinolinecarbonitrile.

25. The pattern formation method of Claim 1,  
wherein said basic compound is an amide derivative such as formamide, *N*-methylformamide, *N,N*-dimethylformamide, acetamide, *N*-methylacetamide, *N,N*-dimethylacetamide or benzamide.

26. The pattern formation method of Claim 1,  
wherein said basic compound is an imide derivative such as phthalimide, succinimide or maleimide.

27. The pattern formation method of Claim 1,  
wherein said basic compound is a compound having a hydroxyl group and

including nitrogen such as 2-hydroxypyridine, monoethanolamine, diethanolamine, triethanolamine, *N*-ethyldiethanolamine, *N,N*-diethylethanolamine, triisopropanolamine, 2,2'-iminodiethanol, 2-aminoethanol, 3-amino-1-propanol, 4-amino-1-butanol, 2-(2-hydroxyethyl)pyridine, 1-(2-hydroxyethyl)piperazine, piperidineethanol, 1-(2-hydroxyethyl)pyrrolidine, 1-(2-hydroxyethyl)-2-pyrrolidinone, 3-piperizino-1,2-propanediol, 3-tropanol, 1-methyl-2-pyrrolidineethanol, 1-aziridineethanol or *N*-(2-hydroxyethyl)phthalimide.

28. The pattern formation method of Claim 4,  
wherein said basic polymer is poly-*N,N*-dimethylaminomethylstyrene, polyaniline,  
10 polyethylenimine, polyvinylamine, polyallylamine, polyornithine or polylysine.

29. The pattern formation method of Claim 7,  
wherein said compound for generating a base through irradiation with light is an  
O-acyl oxime.

30. The pattern formation method of Claim 7,  
15 wherein said compound for generating a base through irradiation with light is an  
O-acyl oxime such as O-acryloylacetophenone oxime or O-acryloylacetophenone oxime.

31. The pattern formation method of Claim 10,  
wherein said compound for generating a base through application of heat is an  
acylsulfonyl.

20 32. The pattern formation method of Claim 10,  
wherein said compound for generating a base through application of heat is *p*-  
phenacylsulfonylstyrene.

33. The pattern formation method of Claim 10,  
wherein said solution is water or perfluoropolyether.

25 34. The pattern formation method of Claim 10,

wherein said exposing light is KrF excimer laser, ArF excimer laser or F<sub>2</sub> laser.